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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,274	02/02/2004	Shih Yang Lee	61994.00008	2319
30256 7590 08/08/2007 SQUIRE, SANDERS & DEMPSEY L.L.P PATENT DEPARTMENT ONE MARITIME PLAZA, SUITE 300 SAN FRANCISCO, CA 94111-3492			EXAMINER WANG, KENT F	
			ART UNIT 2622	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/771,274

Applicant(s)

LEE, SHIH YANG

Examiner

Kent Wang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments, filed on 06/10/2007, have been entered and made of record. Claims 1-13 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-13 have been fully considered but are moot in view of the new ground(s) or rejection. Applicant's arguments with respect to the Ueno reference will be addressed in the context of the rejection below.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 8, 12, and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ueno, US 5,625,415.

Regarding claim 1, Ueno discloses an image capturing method comprising:

- (a) providing a topic object (a person as in Fig 14) and a background object (a mountain as in Fig 14);
- (b) capturing and storing (stored in the frame memory 136; Fig 10 and col. 23, line 66 to col. 24, line 12) a first image (a pre-shooting button 1312, Fig 14) according to a first distance in focus to the background object, wherein the first image includes topic object and background object, the first distance in focus

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corresponds to an exposure value and a first depth of field (calculating the exposure value concerning the image shooting on the basis of image data involved in the area information; col. 2, line 65 to col. 3, line 48)

- (c) acquiring a second distance in focus, wherein the second distance in focus corresponds to exposure value and a second depth of field (a depth of field information generating unit 1214, Fig 11B), and the second depth of field overlaps a part of first depth of field (Figs 19-20 for overlap of different depth-of-field);
- (d) capturing and storing (stored in the frame memory 136, Fig 10) a second image (a shooting button 1314, Fig 14), according to the second distance in focus, the second photo includes topic object and background object (the image data involved in the first and second images stored in the frame memory 136; col. 23, line 66 to col. 24, line12);
- and (e) replacing the first distance in focus with the second distance in focus , and repeating step (c) and step (d) till topic object being within second depth of field (correction processing unit 1216 serves to correct the condition for image shooting; Fig 11B and col. 22, lines 44-65).

Regarding claim 8, Ueno discloses an image capturing method comprising:

- providing a topic object (a person as in Fig 14) and a background object (a mountain as in Fig 14);
- and capturing and storing a plurality of images (the image data involved in the pre-shooting and shooting were stored in the frame memory 136; see col. 23, line

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66 to col. 24, line 12) corresponding to an exposure value (col. 7, line 14 to col. 8, line 5), each one of the images includes topic object and background object corresponding to a distance in focus (defined by parameters such as a focal length; col. 22, lines 1-13), each said distance in focus corresponding to a depth of field (focal length 122 correspond to depth-of-field 1214; col. 22, lines 1-13), wherein each depth of field overlaps part of other to the corresponding distance in focus (Figs 19 and 20 for overlap of different depth-of-field, e.g. b, c, and d, for example topic object "P_d" has a depth of field "d" corresponding distance "D").

Regarding claim 12, Ueno discloses an image-capturing device comprising:

- an input device (input unit 118, Fig 10), for inputting an item to perform a command;
- a storage (frame memory 136, Fig 10), for storing a plurality of programs for said command (image processing unit 132 is constituted of the frame memory; Fig 10, and col. 17, lines 23-32, and col. 28, line 61 to col. 29, line 15);
- a processor (processing unit 132, Fig 10), for outputting an executing command to capture and store a plurality of images (e.g. an image shooting 1312 and a pre-shooting 1314; col. 17, lines 61-67) corresponding to an exposure value (col. 7, line 14 to col. 8, line 5), each one of said images including a topic object and a background object, each said distance in focus corresponding to a depth of field, wherein each depth of field overlaps a part of other depth of field, said topic object is within one of the depth of field (col. 22, lines 1-43 and Figs 19-20).

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- a capturing device (a camera 110; col. 15, lines 18-39), for performing said executing command; and
- a controller (a controller 112; col. 15, lines 18-39), for receiving the command and control the capturing device in accordance with said executing command.

Regarding claim 13, this claim recites same limitations as claim 1. Thus it is analyzed and rejected as previously discussed with respect to claim 1 above.

Claim Rejections - 35 USC § 103

5. Claims 2 – 7 and 9-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ueno in view of Rinn, US 4,639,110.

Regarding claim 2, note the discussion of Ueno claims 1 and 8 above. Ueno does not teach the calculation of first and second depth of field. However, Rinn teaches the first depth of field is calculated from first distance in focus, a first front depth of field, and a first back depth of field (the digitization takes place in such a manner that each step corresponds to a distance focusing zone; col. 4, lines 9-32 and also col. 1, line 56 to col. 2, line 37, Rinn). It would have been obvious to one of ordinary skill in the art at the time this invention was made to have used the method as taught by Ueno as modified by Rinn to achieve the claimed invention. As disclosed in Rinn reference, the motivation for the combination would be to photograph precisely for the measured distance (col. 1, line 67 to col. 2, line 2, Rinn).

Regarding claims 3 and 6, Rinn teaches the front depth of field is a distance of a near point in front of background object (the focusing must be at a lesser distance; col. 4, line 65 to col. 5, line 10 and Fig 1a, also refer to equations in col. 2, Rinn).

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Regarding claims 4 and 7, Rinn teaches the back depth of field is a distance of a near point in back of background object (the focusing must be at a greater distance; col. 5, lines 19-29 and Fig 1a, also refer to equations in col. 2, Rinn).

Regarding claim 5, Rinn teaches the second depth of field is calculated from second distance in focus, a second front depth of field, and a second back depth of field (the digitization takes place in such a manner that each step corresponds to a distance focusing zone; col. 4, lines 9-32 and also col. 1, line 56 to col. 2, line 37, Rinn).

Regarding claims 9-11, these claims are recited same limitations as claims 2-7. Thus they are analyzed as previously discussed with rejected to claims 2-7 above.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KW
3 August 2007



NGOC-YEN VU
SUPERVISORY PATENT EXAMINER